

# DEPARTMENT 16

## NATURAL SCIENCES

<u>Lot#</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
	\$3	\$2.75	\$2.50	\$2.25

Mounted exhibits are to be 14x22 inches unless otherwise stated.

### **Class A - Naturespace and Wild Life Management**

- 1 Scrapbook or poster identifying 10 game birds found in Wisconsin. Tell where they are found and principal food
- 2 Wildlife journal
- 3 Scrapbook or poster display identifying 10 game animals found in Wisconsin. Tell where they are found and principal food
- 4 Exhibit of wildlife area you have studied. Note present habitat features and what species you have observed in your area. Indicate plans on how to improve your area.
- 5 Exhibit on 10 furbearing animals found in Wisconsin. Tell where found and principal food.
- 6 Display of equipment used in trapping. Identify each and tell how used
- 7 Draw a map of your favorite lake. Show structure, habitat, types of fish and water creatures present and type and depth of water
- 8 A poster showing the inter-relationships of people, plants, wildlife, water, air, land and sunshine in your chosen naturespace
- 9 Exhibit on 5 predators found in Burnett County
- 10 Chart or drawing of tracks of 6 game birds and animals
- 11 Collection of plaster casts you have made of 3 different game birds and animals
- 12 Any other display not listed above

### **Class B - Getting to Know the Birds, 1 & 2**

- 1 Exhibit of 10 birds, drawings or cutouts identified (grades 3-8)
- 2 Exhibit of 20 birds, drawings or cutouts identified (grades 9 and over)
- 3 Bird house of your own construction for a specific kind of bird
- 4 Bird feeder of our own construction
- 5 Poster on 5 protected species, include habitat and feeding notes
- 6 Poster or journal describing a bird count you did, include date, time and number and species of birds sighted
- 7 Drawings or photos of 10 identified bird nests
- 8 A photography exhibit featuring any aspects of birds
- 9 A report on a bird you observed or researched
- 10 A map of your yard or wild area identifying bird nests and habitat features. List types of birds observed in this area
- 11 Poster on 5 birds of prey, include habitat and feeding notes
- 12 Any other bird exhibit not listed above

### **Class C - Entomology, Grade 3-5**

- 1 Collection of 20 local common adult insects mounted and identified
- 2 Model of an insect's eye with explanation of how an insect sees
- 3 Exhibit comparing various mouth types of insects
- 4 Display of one adult insect with body parts labeled
- 5 Exhibit illustrating signs of insect activity
- 6 Insect trap made by exhibitor
- 7 Exhibit on types of insect control in the home
- 8 Exhibit on animals and plants that eat insects
- 9 Exhibit illustrating how insects move
- 10 Any other project related exhibit

### **Class D - Entomology, Grade 6 - 8**

- 1 Collection of 30 local, common adult insects, mounted and identified
- 2 Exhibit on proper insect pinning techniques
- 3 Display of one adult insect, mounted, describing habitat and food source
- 4 Poster on how insects use color for defense
- 5 Insect trap made by exhibitor
- 6 Report on an insect experiment

- 7 Display 4 types of insect legs and label their parts
- 8 Any other project related exhibit

**Class E - Entomology, Grade 9 - 12 and 1 yr. beyond**

- 1 Report on an insect experiment
- 2 Butterfly garden plans
- 3 Mosquito rearing/observation chamber
- 4 Display of 4 types of insect mouths and their parts labeled
- 5 Spider web display
- 6 Display of 4 types of insect wings and their parts labeled
- 7 Collection of 40 local, adult insects, mounted and identified
- 8 Collection of 50 local insects, mounted and identified
- 9 Poster on understanding insect pesticide labels
- 10 Insect journal
- 11 Any other project related exhibit

**Class F - A Closer Look At Trees (1st yr. member)**

**Class G - A Closer Look At Trees (2nd yr. member)**

- 1 Collection of 20 leaves of different trees, mounted and labeled
- 2 Collection of 10 tree flowers, mounted and labeled
- 3 Collection of 15 kinds of tree seeds in containers
- 4 Collection of 5 or more evergreen cones, mounted and labeled
- 5 Display of 10 wood samples from native trees. Samples should be 1"-2" in diameter and cut to show cross section
- 6 A Biltmore and height measure stick you have made
- 7 Map of a wood cut with tree species identified
- 8 Cross section of a tree trunk with historical events marked on its annual rings
- 9 Display of 5 different kinds of firewood and the advantages of using one over the other
- 10 Any other display related to trees not listed above

**Class H - Maple Syrup**

- 1 One pint of light amber
- 2 One pint of medium amber
- 3 One pint of dark amber
- 4 Exhibit of maple syrup candy
- 5 Exhibit showing tree tapping
- 6 Baked item using maple syrup, attach recipe
- 7 Any other exhibit relating to your project

**Class I - Wildflower Study**

- 1 Wildflower scrapbook, showing 20 varieties date of discovery and natural habitat (grades 3-8)
- 2 Wildflowers scrapbook, showing 30 or more varieties, date of discovery and natural habitat (grades 9-12)
- 3 Wildflower photography, enlargement of 1 special find
- 4 Wildflower photo collection of 20 varieties, labeled and date of find
- 5 A plant-pressing kit you have made
- 6 A poster illustrating plants that rely on insects for existence
- 7 A photo story of plant associated occupations
- 8 A display on protecting endangered and threatened plants
- 9 An exhibit on edible or mechanical plant use
- 10 Exhibit showing design of a wildflower garden. Identify varieties planted
- 11 Any other wildflower related exhibit not listed above

**Class J - Weather & Climate Study**

- 1 A poster illustrating the water cycle
- 2 Exhibit of an actual weather study done for one month in Burnett County
- 3 A weather station you have built. Identify various instruments and what they record
- 4 A weather vane you have made accompanied by wind direction readings you have recorded
- 5 Exhibit of a violent storm phenomena and how they evolve, i.e. tornados, downbursts, hurricanes, etc.

6 Any other exhibit not listed above

**Class L - Sportsmanship**

- 1 Poster showing types of bows and their parts
- 2 Poster showing types of arrows and their parts
- 3 Poster on archery safety
- 4 Poster showing types of archery equipment and their function
- 5 Poster showing parts of a firearm
- 6 Poster showing parts of a cartridge or ammunition used
- 7 Poster explaining 4 shooting positions and advantageous of each
- 8 Poster illustrating how to clean and properly store a firearm
- 9 Any other not listed above

**Class M - Bees & Honey**

- 1 Jar of honey (labeled as to flower source)
- 2 Exhibit of comb honey
- 3 Nucleus of live bees & queen in case
- 4 Poster, chart or display relating to bees
- 5 Poster, chart or display relating to honey production
- 6 Baked item using honey, attach recipe

**Class N - Recycling**

- 1 Poster showing need for recycling
- 2 Recycled article of metal-attach information card
- 3 Recycled article of plastic-attach information card
- 4 Recycled article of wood-attach information card
- 5 Recycled article of fabric-attach information card
- 6 Recycled article of paper-attach information card
- 7 Poster promoting reducing, reusing or recycling
- 8 Exhibit showing how to make a compost pile, how to maintain it and the uses of compost
- 9 Exhibit showing environmentally smart shopping
- 10 Exhibit showing how your family recycles waste
- 11 Exhibit on new products that are being made from recycled materials; identify initial product source
- 12 Any other project related exhibit

**Class O - Fishing For Fun & Learning**

- 1 Poster identifying 5 fish found in local waters note habitat and preferred food (grades 3-8)
- 2 Poster identifying 10 fish found in local waters, not habitat and preferred food (grades 9 & over)
- 3 Display 4 common knots used in fishing and boating
- 4 Poster of 6 natural baits or foods
- 5 Poster of 6 artificial baits
- 6 Display of 6 plants growing in or at the water edge. Label and identify their importance to fish or water life
- 7 Display of 6 water insects. Label and identify their importance to fish or other water life
- 8 A bait you have made, state its intended use
- 9 An exhibit related to fly fishing
- 10 Hand tied fly you made, state its intended use
- 11 Display of ice fishing equipment, bait and types of fish caught
- 12 Exhibit of 4 different reels with an explanation of where you would use them
- 13 Example of 3 or more homemade lures
- 14 Fishing experience photo story
- 15 Any other exhibit not listed above

**Class P - Winter Travel, Cross County Skiing/Snowshoeing**

- 1 Photo story of a winter adventure you took
- 2 Journal noting your observations on your winter travel
- 3 Poster on comparing types of skis, snowshoes, or clothing for your winter adventure
- 4 Photo story or drawings of types of winter shelters you made

- 5 Poster on safety precautions and practices for a winter adventure
- 6 Homemade piece of equipment or accessory for use on your adventure
- 7 Any other display

#### **Class Q - Camping & Outdoor Skills**

- 1 First aid kit appropriate for your planned adventure. Identify the intended activity
- 2 Poster showing basic camping equipment
- 3 Design a menu for three day camping trip. Include list of food you will pack and gear necessary to cook these meals. Indicate whether or not refrigeration was needed
- 4 Picture story of a camping trip you took
- 5 Homemade article of camping equipment
- 6 Poster on use of map and compass
- 7 Display of knots used in outdoor activities
- 8 Poster on some aspect of safety in the outdoors
- 9 Any other display featuring camping or an outdoor skill

#### **Class R - Hunting**

- 1 Scrapbook or poster of a bow hunting experience you had - where you went, techniques used and results of your hunt
- 2 Scrapbook or poster of a gun hunting experience you had - where you went, techniques used and results of your hunt
- 3 Map a hunting area you used. Show landmark observations, and other interpretations of this area
- 4 Poster or display illustrating field care and dressing of game animals or birds
- 5 Poster on hunting ethics or hunter-landowner relationships
- 6 Any other exhibit on some aspect of hunting

#### **Class S - Home Energy Project**

- 1 Solar hot dog cooker you made
- 2 Sun-dried fruit
- 3 An exhibit describing your visit to a greenhouse
- 4 An insulated drape you have sewn
- 5 An insulated shutter
- 6 Any other exhibit pertaining to your home energy project

#### **Class T - Geology, Soil & Water Studies**

- 1 Exhibit of 10 different kinds of rocks showing names & type
- 2 A map showing geologic regions of Wisconsin
- 3 Any other geology exhibit
- 4 Poster on rock formations
- 5 Display of a soil sample test and how to interpret the results
- 6 Mounted display of a soil profile, explain the various layers
- 7 A poster of exhibit showing how water can become contaminated
- 8 A map of your farm or study area. Identify conservation practices in place or planned, i.e. crop rotation, erosion management, etc.
- 9 Study of a lake or stream for water quality, report findings and what they indicate
- 10 Any other exhibit not listed above

#### **Class U - Backpacking & Hiking**

- 1 Photo story of a backpacking experience
- 2 Journal noting your observations while on a backpacking adventure
- 3 Poster showing how to pack your gear properly
- 4 Menu for a 3-day backpacking experience. List cooking gear and equipment packed for meals
- 5 Homemade piece of equipment or accessory for use on your adventure
- 6 Any other display

#### **Class V - Canoeing/Kayaking**

- 1 Photo story of a canoe or kayak adventure you took
- 2 Journal noting your observations while on your paddling adventure
- 3 Poster on comparing types of canoes, kayaks or paddles
- 4 A canoe or kayak trip plan, including route, equipment, clothing, food, menu for your trip

- 5 A homemade piece of equipment or accessory for use in your adventure
- 6 Any other display